## CLAIMS

Compressing-coding the image data using compression parameters for trial; a parameter estimation step of estimating the compression parameters to compress said image data to a target code volume based on said image data compression result in said trial step; and a compression step of compressing-coding said image data using the compression parameters estimated in said parameter estimation step, wherein said trial step is for obtaining the image capturing conditions of said image data and changing said compression parameters for trial according to said image capturing conditions or classification of the image capturing conditions.

2. A compression coding method comprising: a trial step of compressing-coding the image data using the compression parameters for trial; a parameter estimation step of estimating the compression parameters to compress said image data to a target code volume by fitting said image data compression result into said trial step to "a statistical relationship between the compression parameters and the code volume" obtained by compressing-coding plural test images in advance as a trial; and a compression step of

compressing-coding said image data using the compression parameters estimated in said parameter estimation step, wherein said parameter estimation step is for preparing said statistical relationship for each image capturing condition or classification of image capturing conditions, and selectively using said statistical relationship according to said image data capturing condition.

3. A compression coding method comprising: a trial step of compressing-coding image data orthogonal transformation using the compression parameters for trial; a parameter estimation step of estimating the compression parameters to compress said image data to a target volume based on said image data compression result in said trial step, and a compression step of compressing-coding said image data using the compression parameters estimated in said parameter estimation step, wherein said compression step is for obtaining the image capturing conditions of said image data and modifying the compression parameters estimated in said parameter estimation step according to said image capturing conditions or classification of the image capturing conditions.

A compression coding method comprising: a trial step of quantizing and encoding the image data after orthogonal transformation using a code volume allocation distribution in a frequency domain which is determined by multiplying the standard code volume allocation distribution in the frequency domain by a scale factor for trial, and determining a code volume of said image data; a parameter estimation step of estimating a scale factor for compressing said image data to a target code volume based on the code volume of said image data determined in said trial step; and a compression step of quantizing and encoding said image data after orthogonal transformation using a code volume allocation distribution in a frequency domain determined by multiplying the standard code volume allocation distribution in said frequency domain by the scale factor estimated in said parameter estimation step, wherein said trial stap and said compression step are for preparing the plural of standard code volume allocation distribution in said frequency\domain for each image capturing condition or classification of the image capturing conditions, and selectively using the standar $\mathfrak{d}$  code volume allocation distribution in said frequency domain according to the image capturing condition of said image data.

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transformation step of performing orthogonal transformation on the image data and determining transform coefficients; a quantization step of quantizing the transform coefficients determined in said orthogonal transformation step according to the code volume allocation distribution in the frequency domain; and an encoding step of encoding the transform coefficients quantized in said quantization step, wherein said quantization step is for changing the compression allocation in the frequency domain by changing the code volume allocation distribution in said frequency domain according to the image capturing condition of said image data or classification of the image capturing conditions.

6. The compression coding method according to one of Claim 1 to Claim 5, wherein said image capturing condition is at least one of the conditions of the image capturing sections which capture said image data, that is, image capturing sensitivity setting, signal gain, gamma correction curve, use of electronic zoom, magnification ratio of electronic zoom, shutter speed, white balance adjustment value, special image effect and tone.

The compression coding method according to one of Claim 1 to Claim 5, wherein said image capturing condition is at least one of the conditions of photographing environment in which said image data was captured, that is, use of a strobe light, use of slow synchronization strobe light, use of daylight synchronization strobe light, metering value, multi-pattern metering value, light distribution status of object, vertical/horizontal positioning, camera motion which causes a blurred photograph and temperature.

- 8. The compression coding method according to one of Claim 1 to Claim 4, wherein said image capturing condition is at least one of the conditions of the lens which capture said image data, that is, use of a macro-shot, image magnification, depth of field, aperture value, focal length, angle of view, object distance, focusing status, multi-point focusing status and type of lens.
- 9. The compression coding method according to Claim 5, wherein said image capturing condition is at least one of the conditions of the lens which capture said image data, that is, image magnification, focusing status and multi-point focusing status.

10. A mechanically readable recording medium which record a compression coding program for having a computer execute the compression coding method according to one of Claim 1 to Claim 9.

11. A camera device comprising the recording medium according to Claim 10.

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